# MANUAL DE INSTALACION VALVULA COMPUERTA CVI - CHAUL




GATE VALVE SERIES








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# CAST STEEL GATE VALVE MODEL SCHEDULE ILLUSTRATION

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- Valve type code
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- Take over code
- Connecting manner code
- Material code

★ **Valve type code** Z – Gate valve

★ **Pressure code**
2 – Class150 3 – Class300 5 – Class600 7 – Class900 8 – Class1500 9 – Class2500
2a – 1.6MPa 3a – 2.5MPa 4a – 4.0MPa 5a – 6.4MPa 6a – 10.0MPa 7a – 16.0MPa
8a – 25.0MPa

★ **Structural code**
6 – BB–BG–QS&Y (Bolted bonnet, Bolted gland,OS&Y)
6R – BBR–BG–QS&Y (Bolted bonnet (Ring joint), Bolted gland, OS&Y)
8 – PS–BG–QS&Y (Pressure bonnet,Bolted gland, OS&Y )

★ **Driving type code** A – Electric driving B – Air motor driving C – Gear driving

★ **Take over code**

| Code | Thickness | Code | Thickness | Code | Thickness |
|---|---|---|---|---|---|
| S1 | SCH10 | S4 | SCH40 | S7 | SCH120 |
| S2 | SCH20 | S5 | SCH60 | S8 | SCH140 |
| S3 | SCH30 | S6 | SCH80 | S9 | SCH160 |

★ **Connecting manner code** R – R F ( Raised face ) J – RJ ( Ring joint ) F – MF ( Male–female face ) W – BW ( Butt welded )

★ **Body material code**

1 ) **Cast carbon steel** CC10 – ASTM A216–WCB

2 ) **Cast alloy steel** CA20 – ASTM A217–WC1 CA21 – ASTM A351–CF8M CA22 – ASTM A217–WC9
CA23 – ASTM A217–C5 CA24 – ASTM A217–C12

3 ) **Cast stainless steel** CS30 – ASTM A351–CF8 CS31 – ASTM A351–CF8M CS32 – ASTM A351–CF8C
CS33 – ASTM A351–CF3 CS34 – ASTM A351–CF3M




# FLANGED ENDS GB CAST STEEL GATE VALVE

## PRODUCTS DESIGN FEATURES

Flanged ends cast steel gate vale are used to cut or connect the pipe media under nominal pressure between PN 1.6–16.0Mpa, working temperatures between–46–600℃. in oil industry, chemical industry, fossil–fired power plants.

The main structure features include:

1. sensible products structure, reliable sealing. Excellent performance and good looking.
2. Co hard alloy welded sealing surface, which is wearing resistant, erosion proof, abrasion proof and long–lived.
3. The surface and the adjusting media of the valve shaft are nitrogenized so that it is erosion and abrasion resistant.
4. There is no backward sealing structure in the valve, so the sealing id reliable.
5. The material of the filling and the flange size can be chosen and matched according to the applications and the requirements of the use's. That can satisfies all kinds of working requirements.

## Products specification

| Model | Pressure(MPa) | Driving manner | The nominal size range(mm) |
|---|---|---|---|
| Z2a6R | 1.6 | (Hand operated) | DN15~1500 |
| Z3a6R | 2.5 | (Hand operated) | DN15~1500 |
| Z4a6F | 4.0 | (Hand operated) | DN15~800 |
| Z5a6F | 6.4 | (Hand operated) | DN15~600 |
| Z6a6F | 10.0 | (Hand operated) | DN40~500 |
| Z7a6(8)J | 16.0 | (Hand operated) | DN40~300 |
| Z8a6(8)J | 25.0 | (Hand operated) | DN50~250 |
| Z2a6AR | 1.6 | (Electric Driving) | DN40~1500 |
| Z3a6AR | 2.5 | (Electric Driving) | DN40~1500 |
| Z4a6AF | 4.0 | (Electric Driving) | DN40~800 |
| Z5a6AF | 6.0 | (Electric Driving) | DN40~600 |
| Z6a6AF | 10.0 | (Electric Driving) | DN40~500 |
| Z7a6(8)AJ | 16.0 | (Electric Driving) | DN40~300 |
| Z8a6(8)AJ | 25.0 | (Electric Driving) | DN50~250 |

## Products performance specificatiion

| Nominal pressure | Intensity test pressure | Sealing test | Back seal test | Air test pressure | Temperature | Medium |
|---|---|---|---|---|---|---|
| 1.6 | 1.5×PN | 1.1×PN | 1.1×PN | 0.4~0.7MPa | ≤600℃ | Water、oil & gas |
| 2.5 | 1.5×PN | 1.1×PN | 1.1×PN | 0.4~0.7MPa | ≤600℃ | Water、oil & gas |
| 4.0 | 1.5×PN | 1.1×PN | 1.1×PN | 0.4~0.7MPa | ≤600℃ | Water、oil & gas |
| 6.4 | 1.5×PN | 1.1×PN | 1.1×PN | 0.4~0.7MPa | ≤600℃ | Water、oil & gas |
| 10.0 | 1.5×PN | 1.1×PN | 1.1×PN | 0.4~0.7MPa | ≤600℃ | Water、oil & gas |
| 16.0 | 1.5×PN | 1.1×PN | 1.1×PN | 0.4~0.7MPa | ≤600℃ | Water、oil & gas |
| 25.0 | 1.5×PN | 1.1×PN | 1.1×PN | 0.4~0.7MPa | ≤600℃ | Water、oil & gas |

Note: PN is requested pressure for the body material under the 38℃.




# Instalación e instrucciones de uso.

# Válvula tipo Compuerta

Válvula operada manualmente con volante.

Características y uso

Son generalmente utilizadas en yacimientos petrolíferos, industria química, estaciones eléctricas para cortar y conectar distintos tubos.

Características.

| Tipo | Presión Nominal | Presión en prueba de Fuerza | Prueba de sellado a alta presión | Prueba de sellado a baja presión | Rango de temperatura | Medios aplicables |
|---|---|---|---|---|---|---|
| Z4IH | 150Lb | 3.03Mpa | 2.2Mpa | 0.6Mpa | CC10 425C° | Agua, aceite Vapor. |

Teoría de funcionamiento e instrucciones de uso.

1. Las válvulas están diseñadas y fabricadas bajo el estándar API 600 JB/T7746 y probadas bajo el estándar API598JB/T9092.

2. Accionamiento por medio de volante, que en el sentido de las manecillas del reloj, cierran la compuerta y con un movimiento contrario se abrirá la compuerta.

3. La válvula se sella ajustadamente mientras se abre la compuerta, el vástago se encuentra en su posición más alta. El sello de seguridad, mantendrá el envase y el material separados, lo que extenderá el tiempo de uso del empaque.




4. El sello Metal-Metal en acero inoxidable T-316, es resistente a la abrasión y corrosión para un mayor tiempo de uso.

5. Se utiliza la cuña de acero para un sellado confiable.

6. Las válvulas tienen una configuración razonable, diseño único, excelentes características y una confiable función de sellado.

Requerimientos para su instalación.

1. Para instalar cualquier válvula debe asegurarse que son fáciles y seguras de operar, reparar, instalar y desinstalar.

2. El vástago deberá ser instalado verticalmente en los tubos aclínicos.

3. Mantenga la misma dirección del fluido del material y el cuerpo de la válvula. Sin usar una flecha, por favor instale como la válvula lo indica. No lo instale en sentido contrario.

4. Antes de la instalación, por favor revise el tipo solicitado. El interior y exterior de las válvulas, Las válvulas deberán estar en buenas condiciones.

5. Al instalar, los extremos de la válvula deberán mantener un razonable y consistente espacio entre la brida de la válvula y la brida del tubo. Que no exista una unión errónea, cruzada o abierta.. Coloque la junta en el centro de la brida. Para atornillar manténgala balanceada y ajustada. Después de atornillar, revise que el espacio entre las partes sea el mismo.

Configuración de la válvula, ilustración básica, piezas principales y lista de material.
Válvula de compuerta, Extremos bridados clase 150, Vástago ascendente.

MANUAL DE INSTALACION VALVULA COMPUERTA CVI - CHAUL




| No. | Nombre de las piezas | Material |
|---|---|---|
| 1 | cuerpo | CF8M |
| 2 | cuña de disco | CF8M+HCr |
| 3 | asiento | F316+HCr |
| 4 | vástago | F316 |
| 5 | junta | grafito y acero inoxidable |
| 6 | bonete | CF8M |
| 7 | envase | grafito |
| 8 | perno | B8 |
| 9 | envase de asiento | F316 |

Esquema principal de dimensiones y tamaño
(Catalogo de producto adjunto)

Mantenimiento y protección (cuidado)

1. Coloque la válvula en la corriente llenado ambos lados. Para un almacenamiento a largo plazo unte el aceite a prueba de óxido en el tiempo estimado.

2. Deberá cerrar la compuerta cuando la válvula esté en almacenamiento para proteger la cara del sellado.

3. Limpie la válvula antes de la instalación.

4. Revise la presión y el diámetro antes de la instalación para evitar una instalación incorrecta.
5. La válvula podrá ser instalada en cualquier lugar

6. Las válvulas deberán mantenerse en óptimas condiciones de operación, utilice lubricante cada determinado tiempo.




| Falla | Motivo | Posible solución |
|---|---|---|
| Gotera/fuga | La prensa no esta ajustada | Ajuste el nudo |
| | No sella la compuerta | Ajuste el volante |
| | Envasado a destiempo o | Reemplace el envase |
| | almacenamiento incorrecto | |
| Gotera/fuga | La pieza puede estar sucia o | Limpie la pieza o |
| reemplace | | |
| del cuarto de | la compuerta dañada. | las piezas del sellado. |
| Sellado | | |
| Gotera/fuga de la | Los tornillos no están bien | apriete los tornillos |
| Junta o de las puntas | ajustados | |
| Del sellado | | |
| La compuerta no es flexible | El envase esta muy ajustado | Afloje el nudo de la |
| prensa | | |
| O el disco de la cuña | La prensa fija esta inclinada | Corrija/Arregle la |
| prensa | | |
| No puede abrirse | La rosca del yugo esta sucia o | Abra y repare el |
| tornillo o | | |
| | Dañada | limpie el yugo |
| | El nudo del yugo esta roto o dañado | Reemplace el nudo del |
| yugo | | |
| | El vástago esta doblado | Corrija/Arregle el |
| vástago | | |




# FLANGED & BUTT-WELDING ENDS API CAST STEEL GATE VALVE

## PRODUCTS DESIGN FEATURES

API cast steel gate valves are used to cut or connect the pipe media in Class 150~2500 and working temperatures ≤600℃, in oil industry, chemical industry, fossil-fired power plants.

1.The products designs are in accordance with the API600 or API6D, with rational structure, reliable seal, excellentperformance, and pretty appearance.

2. Co hard alloy welded sealing surface、 with pressures≥Class600 which is wearing resistant, erosion proof, abrasion proof and long-lived.

3. The surface and the adjusting media of the valve shaft are nitrogenizated so that it is erosion and abrasion resistant.

4. The centralcavity with pressures ≥Class900 adopts self-tightening sealing structure,which means that the sealing will rise with the intramural pressure, and the sealing is highly reliable.

5. There is backward sealing structure in the valve, so the sealing is reliable.

6. The material of the filling and the size of the flanged ends& butt-welding ends can be chosen and matched according to the applications and the applications and the requirements of the users. That can satisfies all kinds of working requirements.

## Products specification

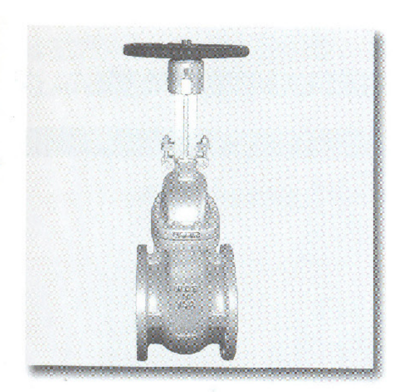
| Model | Class | Driving manner & structural Type | Connecting Type | Nominal siz |
|---|---|---|---|---|
| Z26RFS | 150 | Hand-operated & Bolted bonnet | Flanged ends | 2"~36" |
| Z36RFS | 300 | | | 2"~24" |
| Z56RFS | 600 | | | 2"~24" |
| Z76JFS | 900 | | | 2"~12" |
| Z26CRFS | 150 | Electric or Gear driving & Bolted bonnet | Flanged ends | 14"~48" |
| Z36CRFS | 300 | | | 14"~48" |
| Z56A(C)RFS | 600 | | | 6"~48" |
| Z76A(C)JFS | 900 | | | 3"~16" |
| Z86A(C)JFS | 1500 | | | 3"~16" |
| Z78JPS | 900 | Hand-operated & Pressure bonnet | Flanged ends | 2"~6" |
| Z88JPS | 1500 | | | 2"~4" |
| Z98JPS | 2500 | | | 2"~4" |
| Z78S7(1)WPS | 900 | Hand-operated & Pressure bonnet | But-welding ends | 2"~6" |
| Z88S9(7)WPS | 1500 | | | 2"~4" |
| Z98S9WPS | 2500 | | | 2"~4" |
| Z78A(C)JPS | 900 | Electric or Gear driving& Pressure bonnet | Flanged ends | 3"~20" |
| Z88A(C)JPS | 1500 | | | 3"~20" |
| Z98A(C)JPS | 2500 | | | 6"~8" |
| Z78A(C)S7(1)WPS | 900 | Electric or Gear driving& Pressure bonnet | But-welding ends | 3"~20" |
| Z88A(C)S9(7)WPS | 1500 | | | 3"~20" |
| Z98A(C)S9WPS | 2500 | | | 6"~8" |

## Products performance specificatiion

| Class | ( MPa ) Intensity test pressure | ( MPa ) Sealing test pressure | (MPa) Back seal test | (MPa) Air test pressure | Temperature | Medium |
|---|---|---|---|---|---|---|
| 150 | 1.5×PN | 1.1×PN | 1.1×PN | 0.4-0.7MPa | ≤600℃ | Water、oil & gas |
| 300 | 1.5×PN | 1.1×PN | 1.1×PN | 0.4-0.7MPa | ≤600℃ | Water、oil & gas |
| 600 | 1.5×PN | 1.1×PN | 1.1×PN | 0.4-0.7MPa | ≤600℃ | Water、oil & gas |
| 900 | 1.5×PN | 1.1×PN | 1.1×PN | 0.4-0.7MPa | ≤600℃ | Water、oil & gas |
| 1500 | 1.5×PN | 1.1×PN | 1.1×PN | 0.4-0.7MPa | ≤600℃ | Water、oil & gas |
| 2500 | 1.5×PN | 1.1×PN | 1.1×PN | 0.4-0.7MPa | ≤600℃ | Water、oil & gas |

Note: PN is requested pressure for the body material under the 38℃.

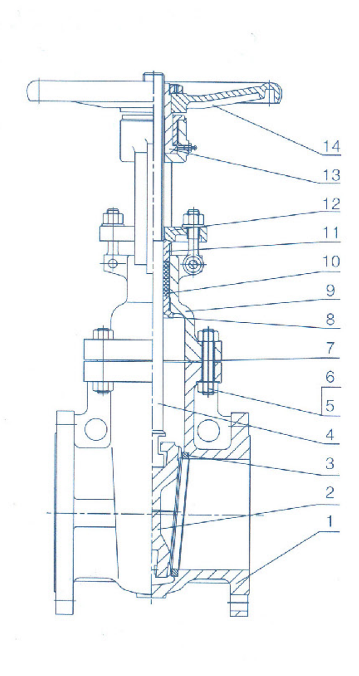


## BOLTED BONNET API CAST STEEL GATE VALVE

| Technical specification | |
|---|---|
| Structural formation | BB-BG-OS&Y |
| Driving | Hand-operated、Gear driving、Electric driving |
| Design standard | API 600 |
| Face to face | ASME B16.10、MSS-SP-44 |
| Flanged ends | ASME B16.5 、ASME B16.47 |
| Test & inspection | API 600、API598、ISO 5208 |

Notes: The sizes of serial valve connecting flange can be designed according to customers' requirement.

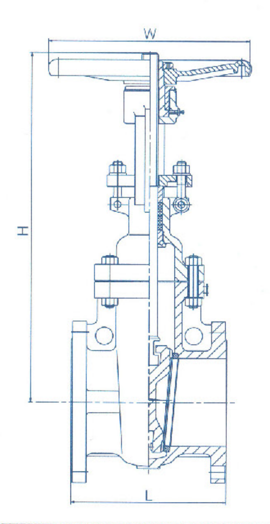


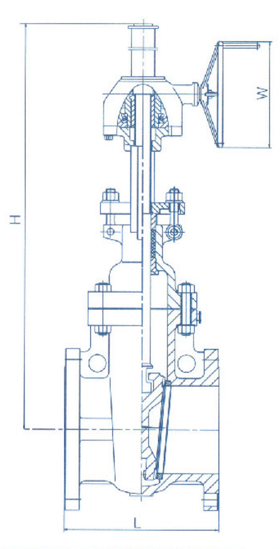

### Form of major parts materials

| No. | Part name | Material |
|---|---|---|
| 1 | Body | ASTM A216-WCB、ASTM A352-LCB<br>ASTM A217-WC1、WC6、WC9、C5<br>ASTM A351-CF8、CF8M、CF8C、CF3、CF3M |
| 2 | Wedge | ASTM A216-WCB、ASTM A352-LCB<br>ASTM A217-WC1、WC6、WC9、C5<br>ASTM A351-CF8、CF8M、CF8C、CF3、CF3M |
| 3 | Seat | ASTM A105、ASTM A350-LF2<br>ASTM A182-F11、F22、F5、F9 |
| 4 | Stem | ASTM A182-F6a、ASTM A182-F22<br>ASTM A182-F304、F316、F321、F304L、F316L |
| 5 | Bolt | ASTM A193-B7、A320-B8、A193-B8M、A193-L7 |
| 6 | Nut | ASTM A194-2H、A194-8、A194-8M、A193-4 |
| 7 | Gasket | Graphite & stainless steel |
| 8 | Back seat | ASTM A182-F6a、ASTM A182-F22<br>ASTM A182-F304、F316、F321、F304L、F316L |
| 9 | Bonnet | ASTM A216-WCB、ASTM A352-LCB<br>ASTM A217-WC1、WC6、WC9、C5<br>ASTM A351-CF8、CF8M、CF8C、CF3、CF3M |
| 10 | Packing | Flexible Graphite |
| 11 | Gland | ASTM A276 410<br>ASTM A276-304、316、321、304L、316L |
| 12 | Gland flange | ASTM A216-WCB<br>ASTM A351-CF8、CF8M、CF8C、CF3、CF3M |
| 13 | Stem nut | ASTM A439-D2C |
| 14 | Hand wheel | ASTM A47-32510 |




## BOLTED BONNET API CAST STEEL GATE VALVE



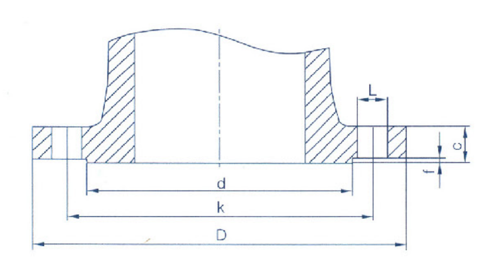




**Size & weight** — **Class 150**

| Model | Z26(C)R-CC10、CA20、CS30 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Hand Operated | | | | Gear Driving | | | | |
| Size | L | H | W | Weight | L | H | W | Gear device | Weight |
| 2 | 178 | 360 | 200 | 22 | – | – | – | – | – |
| 2½ | 190 | 410 | 200 | 31 | – | – | – | – | – |
| 3 | 203 | 440 | 250 | 45 | – | – | – | – | – |
| 4 | 229 | 500 | 250 | 61 | – | – | – | – | – |
| 5 | 254 | 580 | 300 | 89 | – | – | – | – | – |
| 6 | 267 | 660 | 300 | 121 | – | – | – | – | – |
| 8 | 292 | 775 | 350 | 134 | – | – | – | – | – |
| 10 | 330 | 925 | 450 | 280 | – | – | – | – | – |
| 12 | 356 | 1100 | 500 | 321 | – | – | – | – | – |
| 14 | 381 | 1295 | 600 | 450 | 381 | 1651 | 310 | BA-0 | 455 |
| 16 | 406 | 1435 | 600 | 605 | 406 | 1879 | 460 | BA-1 | 645 |
| 18 | 432 | 1626 | 650 | 810 | 432 | 2184 | 460 | BA-1 | 850 |
| 20 | 457 | 1829 | 650 | 880 | 457 | 2431 | 610 | BA-2 | 950 |
| 24 | 508 | 2175 | 700 | 1490 | 508 | 2873 | 610 | BA-2 | 1460 |
| 26 | 559 | 2235 | 750 | 1750 | 559 | 3086 | 610 | BA-2 | 1830 |
| 28 | 610 | 2310 | 750 | 2010 | 610 | 3327 | 610 | BA-2 | 2080 |
| 30 | 610 | 2695 | 800 | 2268 | 610 | 3606 | 610 | BAA-3 | 2565 |
| 32 | – | – | – | – | 660 | 3708 | 610 | BAA-3 | 3100 |
| 36 | – | – | – | – | 711 | 3924 | 610 | BAA-3 | 3950 |
| 40 | – | – | – | – | 762 | 4318 | 610 | BAA-3 | 4650 |
| 42 | – | – | – | – | 813 | 4546 | 610 | BAA-3 | 5100 |
| 48 | – | – | – | – | 864 | 5181 | 610 | BAA-3 | 6500 |
| 54 | – | – | – | – | 1016 | 5501 | 610 | BAA-3 | 7900 |
| 60 | – | – | – | – | 1067 | 6066 | 610 | BAA-3 | 9300 |




## RAISED FACE INTEGRAL STEEL PIPE FLANGE



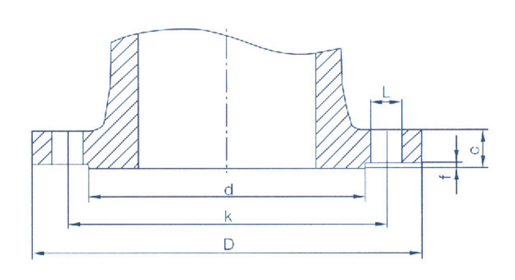

JB/T 79.1–94 PN1.6MPa

| DN | Size ends | | | Bolt | | Sealing size | | C | Welding neck | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nominal size | Outside diameter of flange series1/series2 | Diameter of bolt Circle | Diameter of bolt holes series1/ series2 | Number of bolts | Thread series1/ series2 | d | f | Thickness of flange | $N_{max}$ | $S_{max}$ | R |
| 15 | 95 | 65 | 14 | 4 | M12 | 45 | 2 | 14 | 39 | 12 | 4 |
| 20 | 105 | 75 | 14 | 4 | M12 | 55 | 2 | 14 | 44 | 12 | 4 |
| 25 | 115 | 85 | 14 | 4 | M12 | 65 | 2 | 14 | 49 | 12 | 4 |
| 32 | 140/135 | 100 | 18 | 4 | M16 | 78 | 2 | 16 | 56 | 12 | 4 |
| 40 | 150/145 | 110 | 18 | 4 | M16 | 85 | 3 | 16 | 64 | 12 | 4 |
| 50 | 165/160 | 125 | 18 | 4 | M16 | 100 | 3 | 16 | 74 | 12 | 5 |
| 65 | 185/180 | 145 | 18 | 4 | M16 | 120 | 3 | 18 | 95 | 15 | 5 |
| 80 | 200/195 | 160 | 18 | 8 | M16 | 135 | 3 | 20 | 110 | 15 | 5 |
| 100 | 220/215 | 180 | 18 | 8 | M16 | 155 | 3 | 20 | 130 | 15 | 5 |
| 125 | 250/245 | 210 | 18 | 8 | M16 | 185 | 3 | 22 | 161 | 18 | 6 |
| 150 | 285/280 | 240 | 23 | 8 | M20 | 210 | 3 | 24 | 186 | 18 | 6 |
| (175) | 310 | 270 | 23 | 8 | M20 | 240 | 3 | 26 | 215 | 20 | 6 |
| 200 | 340/335 | 295 | 23 | 12 | M20 | 265 | 3 | 26 | 240 | 20 | 6 |
| (225) | 365 | 325 | 23 | 12 | M20 | 295 | 3 | 26 | 269 | 22 | 6 |
| 250 | 405 | 355 | 26/25 | 12 | M24/M22 | 320 | 3 | 30 | 298 | 24 | 8 |
| 300 | 460 | 410 | 26/25 | 12 | M24/M22 | 375 | 4 | 30 | 348 | 24 | 8 |
| 350 | 520 | 470 | 26/25 | 16 | M24/M22 | 435 | 4 | 34 | 402 | 26 | 8 |
| 400 | 580 | 525 | 30 | 16 | M27 | 485 | 4 | 36 | 456 | 28 | 10 |
| 450 | 640 | 585 | 30 | 20 | M27 | 545 | 4 | 40 | 510 | 30 | 10 |
| 500 | 715/705 | 650 | 34 | 20 | M30 | 608 | 4 | 44 | 564 | 32 | 10 |
| 600 | 840 | 770 | 36/41 | 20 | M33/M36 | 718 | 5 | 48 | 672 | 36 | 10 |
| 700 | 910 | 840 | 36/41 | 24 | M33/M36 | 788 | 5 | 50 | 776 | 38 | 12 |
| 800 | 1025/1020 | 950 | 41 | 24 | M36 | 898 | 5 | 52 | 880 | 40 | 12 |
| 900 | 1125/1120 | 1050 | 41 | 28 | M36 | 998 | 5 | 54 | 984 | 42 | 12 |
| 1000 | 1255 | 1170 | 42/48 | 28 | M39/M42 | 1110 | 5 | 56 | 1084 | 42 | 12 |
| 1200 | 1485 | 1390 | 48/54 | 32 | M45/M48 | 1325 | 5 | 58 | 1288 | 44 | 15 |
| 1400 | 1685 | 1590 | 48/54 | 36 | M45/M48 | 1525 | 5 | 60 | 1492 | 46 | 15 |
| 1600 | 1930 | 1820 | 58 | 40 | M52 | 1750 | 5 | 68 | 1704 | 52 | 15 |






## INTEGRAL STEEL PIPE FLANGE




**CLASS150、300、400、600 R F ASME B 16.5、B 16.47**

**CLASS 150 R F ASME B16.5、ASME B16.47**

| DN | D | K | L | (Bolt)n-Th | d | f | C |
|---|---|---|---|---|---|---|---|
| 2 | 152 | 120.5 | 18 | 4-M16 | 92 | 2 | 16 |
| 2-1/2 | 178 | 139.5 | 18 | 4-M16 | 105 | 2 | 18 |
| 3 | 190 | 152.5 | 18 | 4-M16 | 127 | 2 | 19 |
| 4 | 229 | 190.5 | 18 | 8-M16 | 157 | 2 | 24 |
| 5 | 254 | 216 | 22 | 8-M20 | 186 | 2 | 24 |
| 6 | 279 | 241.5 | 22 | 8-M20 | 216 | 2 | 26 |
| 8 | 343 | 298.5 | 22 | 8-M20 | 270 | 2 | 29 |
| 10 | 406 | 362 | 26 | 12-M24 | 324 | 2 | 31 |
| 12 | 483 | 432 | 26 | 12-M24 | 381 | 2 | 32 |
| 14 | 533 | 476 | 29.5 | 12-M27 | 413 | 2 | 35 |
| 16 | 597 | 540 | 29.5 | 16-M27 | 470 | 2 | 37 |
| 18 | 635 | 578 | 32.5 | 16-M30 | 533 | 2 | 40 |
| 20 | 699 | 635 | 32.5 | 20-M30 | 584 | 2 | 43 |
| 24 | 813 | 749.5 | 35.5 | 30-M33 | 692 | 2 | 48 |
| 26 | 870 | 806.5 | 35 | 24-M33 | 749 | 2 | 68 |
| 28 | 927 | 863.6 | 35 | 28-M33 | 800 | 2 | 72 |
| 30 | 984 | 914 | 35 | 28-M33 | 857 | 2 | 75 |
| 32 | 1060 | 978 | 41 | 28-M39 | 914 | 2 | 81 |
| 36 | 1168 | 1086 | 41 | 32-M39 | 1022 | 2 | 90 |
| 40 | 1289 | 1200 | 41 | 36-M39 | 1124 | 2 | 90 |
| 42 | 1346 | 1257 | 41 | 36-M39 | 1194 | 2 | 97 |
| 48 | 1511 | 1422 | 41 | 44-M39 | 1359 | 2 | 108 |

**CLASS 300 R F ASME B16.5、ASME B16.47**

| DN | D | K | L | (Bolt)n-Th | d | f | C |
|---|---|---|---|---|---|---|---|
| 2 | 165 | 127 | 18 | 8-M16 | 92 | 2 | 23 |
| 2-1/2 | 190 | 149 | 18 | 8-M20 | 105 | 2 | 26 |
| 3 | 210 | 168.5 | 18 | 8-M20 | 127 | 2 | 29 |
| 4 | 254 | 200 | 18 | 8-M20 | 157 | 2 | 32 |
| 5 | 279 | 235 | 22 | 8-M20 | 186 | 2 | 35 |
| 6 | 318 | 270 | 22 | 12-M20 | 216 | 2 | 37 |
| 8 | 381 | 330 | 22 | 12-M24 | 270 | 2 | 42 |
| 10 | 445 | 387.5 | 26 | 16-M27 | 324 | 2 | 48 |
| 12 | 521 | 451 | 26 | 16-M30 | 381 | 2 | 51 |
| 14 | 584 | 514.5 | 29.5 | 20-M30 | 413 | 2 | 54 |
| 16 | 648 | 571.5 | 29.5 | 20-M33 | 470 | 2 | 58 |
| 18 | 711 | 628.5 | 32.5 | 24-M33 | 533 | 2 | 61 |
| 20 | 775 | 686 | 32.5 | 24-M33 | 584 | 2 | 64 |
| 24 | 914 | 813 | 35.5 | 24-M39 | 692 | 2 | 70 |
| 26 | 972 | 876 | 35 | 28-M42 | 749 | 2 | 79 |
| 28 | 1035 | 940 | 35 | 28-M42 | 800 | 2 | 86 |
| 30 | 1092 | 997 | 35 | 28-M45 | 857 | 2 | 92 |
| 32 | 1149 | 1054 | 41 | 28-M48 | 914 | 2 | 99 |
| 36 | 1270 | 1168 | 41 | 32-M52 | 1022 | 2 | 105 |
| 40 | 1238 | 1156 | 41 | 32-M42 | 1086 | 2 | 114 |
| 42 | 1289 | 1206.5 | 41 | 32-M42 | 1137 | 2 | 119 |
| 48 | 1467 | 1372 | 41 | 32-M48 | 1302 | 2 | 133 |

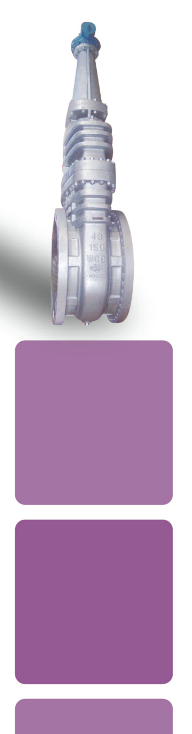
**CLASS 600 R F ASME B16.5、ASEM B16.47**

| DN | D | K | L | (Bolt)n-Th | d | f | C |
|---|---|---|---|---|---|---|---|
| 2 | 165 | 127 | 19 | 8-M16 | 92 | 6.4 | 25.5 |
| 2-1/2 | 190 | 149.2 | 22 | 8-M20 | 105 | 6.4 | 29 |
| 3 | 210 | 168.3 | 22 | 8-M20 | 127 | 6.4 | 32 |
| 4 | 254 | 200 | 26 | 8-M24 | 157 | 6.4 | 35 |
| 5 | 279 | 234.9 | 26 | 8-M24 | 186 | 6.4 | 38.5 |
| 6 | 318 | 269.9 | 26 | 12-M24 | 216 | 6.4 | 41.5 |
| 8 | 381 | 330.2 | 29 | 12-M27 | 270 | 6.4 | 48 |
| 10 | 445 | 387.3 | 32 | 16-M30 | 324 | 6.4 | 54 |
| 12 | 520 | 450.8 | 35 | 16-M33 | 381 | 6.4 | 57.5 |
| 14 | 585 | 514.3 | 35 | 20-M33 | 413 | 6.4 | 60.5 |
| 16 | 650 | 571..5 | 39 | 20-M36 | 470 | 6.4 | 63.5 |
| 18 | 710 | 628 | 39 | 24-M36 | 533 | 6.4 | 67 |
| 20 | 775 | 685.8 | 42 | 24-M39 | 584 | 6.4 | 70 |
| 24 | 915 | 812.8 | 48 | 24-M45 | 692 | 6.4 | 76.5 |
| 26 | 851 | 781 | 39 | 28-M36 | 711 | 6.4 | 89 |
| 28 | 914 | 838 | 41 | 24-M39 | 762 | 6.4 | 95 |
| 30 | 972 | 895.4 | 41 | 28-M39 | 819 | 6.4 | 102 |
| 32 | 1035 | 952.5 | 44 | 28-M42 | 873 | 6.4 | 108 |

**CLASS 600 R F ASME B16.5、ASME B16.47**

| DN | D | K | L | (Bolt)n-Th | d | f | C |
|---|---|---|---|---|---|---|---|
| 2 | 165 | 127 | 19 | 8-M16 | 92 | 6.4 | 26 |
| 2-1/2 | 190 | 149 | 22 | 8-M20 | 100 | 6.4 | 29 |
| 3 | 210 | 168 | 22 | 8-M20 | 127 | 6.4 | 32 |
| 4 | 273 | 216 | 26 | 8-M24 | 157 | 6.4 | 38 |
| 5 | 330 | 266.5 | 29 | 8-M27 | 186 | 6.4 | 45 |
| 6 | 356 | 292 | 29 | 12-M27 | 216 | 6.4 | 48 |
| 8 | 419 | 349 | 32 | 12-M30 | 270 | 6.4 | 56 |
| 10 | 508 | 432 | 35 | 16-M33 | 324 | 6.4 | 64 |
| 12 | 559 | 489 | 35 | 20-M33 | 381 | 6.4 | 67 |
| 14 | 603 | 527 | 38 | 20-M36 | 413 | 6.4 | 70 |
| 16 | 686 | 603 | 41 | 20-M39 | 470 | 6.4 | 77 |
| 18 | 743 | 654 | 44 | 20-M42 | 533 | 6.4 | 83 |
| 20 | 813 | 724 | 44 | 24-M42 | 584 | 6.4 | 89 |
| 24 | 940 | 838 | 52 | 24-M48 | 692 | 6.4 | 102 |
| 26 | 1016 | 914.4 | 51 | 28-M48 | 749 | 6.4 | 108 |
| 28 | 1073 | 965.2 | 54 | 28-M48 | 800 | 6.4 | 111 |
| 30 | 1130 | 1022.4 | 54 | 28-M52 | 857 | 6.4 | 114 |
| 32 | 1194 | 1079.5 | 60 | 28-M56 | 914 | 6.4 | 117 |

# MANUAL DE INSTALACION VALVULA COMPUERTA CVI - CHAUL



GATE VALVE SERIES




**CHAUL VALVE INC.**
5757 Westheimer Suite 3-346
Houston, Texas, 77057 U.S.A.
Phone: (713) 545 9766 (U.S.A)
Fax: (713) 827 1220 (U.S.A)

**CHAUL MART, S.A. DE C.V.**
Av. Patriotismo No. 229 Piso 7 y 8
Col. San Pedro de Los Pinos
Del. Benito Juárez, México, D.F C.P. 03800
Tel: 5049 3177, 78 y 80 Fax: 2881 0312